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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|----------------------|
| 10/712,455 | 11/12/2003 | Binghua Hu | TI-35362 | 9290 |
| 23494 | 7590 | 03/21/2006 | EXAMINER | |
| TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265 | | | | SCHILLINGER, LAURA M |
| ART UNIT | | PAPER NUMBER | | |
| | | 2813 | | |

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|----------------------|--------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/712,455 | HU ET AL. | |
| | Examiner | Art Unit | |
| | Laura M. Schillinger | 2813 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 14 November 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 8-14 is/are pending in the application.
- 4a) Of the above claim(s) 15-26 is/are withdrawn from consideration.
- 5) Claim(s) 8-14 is/are allowed.
- 6) Claim(s) _____ is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Election/Restrictions

Newly submitted claims 15-26 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claims 15-26 are drawn to an independent and distinct invention from that of originally elected claims.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 15-26 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Allowable Subject Matter

Claims 8-14 are allowed.

The following is an examiner's statement of reasons for allowance:

Applicant's arguments with regard to the Hause reference are deemed persuasive. Upon further search other pieces of prior art were found relevant to Applicant's claims.

In reference to claim 8, Sasaki (US 2003/0040159) teaches a method for forming a LDMOS transistor, comprising:

forming a deep n-well region in a substrate (Fig.1A (103));

forming a patterned photoresist layer over said deep n-well region wherein said patterned photoresist layer comprises at least one opening (Fig.1B (104));

implanting an arsenic species into said deep n-well through said opening (Fig.1B (105));

implanting an boron species into said deep n-well through said opening (Fig.1C (106));

forming LOCOS region and isolation structures in said deep n-well (Fig.1A (102));

forming a gate dielectric layer on said deep n-well region (Fig. 1D (107)).

However Sasaki fails to teach forming an epitaxial layer in the substrate and forming the deep n-well in the epitaxial layer as claimed. Furthermore, Sasaki fails to teach baking the photoresist as claimed. Lastly, Sasaki fails to teach implanting an arsenic species prior to implanting boron species as claimed.

Blanchard (5869371) also teaches a similar method which includes forming an epitaxial layer; however fails to specify that the implantation step be carried out through the same opening.

Even in combination, prior art fails to teach nor suggest the combination of the elements of claim 8 with baking the photoresist. Therefore, claim 8 is deemed to contain allowable subject matter. Claims 9-14 depend from claim 8 and act only to further narrow the allowable subject matter and are therefore also deemed to be allowable over prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

This application is in condition for allowance except for the following formal matters:
Claims 15-26 must be canceled.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M. Schillinger whose telephone number is (571) 272-1697. The examiner can normally be reached on M-T, R-F 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W. Whitehead, Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Laura M Schillinger
Primary Examiner
Art Unit 2813

03/16/06